

ABSTRACT

5 An object of the present invention is to provide a
damper which has a simple structure and allowing the setting
of arbitrary torque with smooth reproducibility. The damper
includes a shaft member 2 having wings 4a, 4b which are
10 formed on the outer periphery of a shaft 3, a cylindrical
casing 1 relative-rotatably incorporating the shaft member,
and oil chambers A to D which are provided between the outer
periphery of the shaft member and the inner periphery of the
casing. Protrusions are provided on the inner periphery of
15 the casing so as to be slidable on the outer periphery of
the shaft. Communicating paths 5a, 5b are passed through
the shaft to make the communication between a pair of the
adjacent oil chambers out of all the oil chambers which are
individually surrounded by the wings and the protrusions.
20 At least one of openings of the communicating path is closed
by the protrusion 8a, 8b of the casing within a relative-
rotating range of the shaft member 2.

SELECTED FIGURE FIG. 1

10074905-11301